JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY, VOLUME 234 (1987)

AUTHOR INDEX

Akiba, U. 163
Anni, K. 31
Anthony, L.J. 107

Baltruschat, H. 229
Bard, A.J. 347
Beden, B. 329
Braun, A.M. 329

Castro-Acuña, C.M. 347
Cetnarska, M. 263
Chang, C.A. 71
Collman, J.P. 277
Crouigneau, P. 329

Damaskin, B. 31
De Jong, H.G. 1, 17
Desilvestro, J. 237

Enea, O. 329

Fan, F.-R.F. 347
Feldman, B.J. 213
Frank, D.G. 229

Galus, Z. 361
Gavach, C. 341
Goodenough, J.B. 193

Hagiwara, M. 251
Hamelin, A. 93
Hamnett, A. 185, 193
Hanson, K.J. 107
Helm, S. 277
Hendricks, N.H. 277
Hinman, A.S. 145
Hojo, M. 251
Holland, R.A. 107
Holub, K. 1
Hubbard, A.T. 229

Imai, Y. 251

Kato, T. 163
Kim, K. 277
Kondo, A.E. 145
Koryta, J. 355
Koval, C.A. 133
Kozlov, Y.N. 355

Lamy, C. 315
Lee, P. 55
Leger, J.-M. 315
Le Mest, Y. 277
Lewis, S.K. 229
L'Her, M. 277
Liu, Y. 85
Lu, F. 229

Maksymiuk, K. 361
Matsue, T. 163
Melroy, O.R. 213
Mortimer, R. 185
Murthy, J.Y. 55

Nagai, H. 251
Nedyalkov, M. 341

Olson, J.B. 133
Osa, T. 163
Owlia, A. 297

Paliteiro, C. 193
Palm, U. 31
Pang, Z. 71
Pankratova, I. 31
Papoutsis, A. 315
Pavelich, B.J. 145
Pingarron Carrazon, J.M. 175
Polo Diez, L.M. 175
Pons, S. 145

Reviejo Garcia, A.J. 175
Rusling, J.F. 297

Salaita, G.N. 229
Salve, M. 31
Skalický, M. 355
Song, D. 229
Stoicoviciu, L. 93
Stroka, J. 263
Suda, M. 163

Tuzhi, P. 119

Uchida, I. 163

Väärtnõu, M. 31
Van Leeuwen, H.P. 1, 17
Villa, V. 119

Wang, E. 71, 85
Wang, J. 119
Weaver, M.J. 237

Zapien, D.C. 229

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY, VOLUME 234 (1987)

AUTHOR INDEX

Akiba, U. 163
Anni, K. 31
Anthony, L.J. 107

Baltruschat, H. 229
Bard, A.J. 347
Beden, B. 329
Braun, A.M. 329

Castro-Acuña, C.M. 347
Cetnarska, M. 263
Chang, C.A. 71
Collman, J.P. 277
Crouigneau, P. 329

Damaskin, B. 31
De Jong, H.G. 1, 17
Desilvestro, J. 237

Enea, O. 329

Fan, F.-R.F. 347
Feldman, B.J. 213
Frank, D.G. 229

Galus, Z. 361
Gavach, C. 341
Goodenough, J.B. 193

Hagiwara, M. 251
Hamelin, A. 93
Hamnett, A. 185, 193
Hanson, K.J. 107
Helm, S. 277
Hendricks, N.H. 277
Hinman, A.S. 145
Hojo, M. 251
Holland, R.A. 107
Holub, K. 1
Hubbard, A.T. 229

Imai, Y. 251

Kato, T. 163
Kim, K. 277
Kondo, A.E. 145
Koryta, J. 355
Koval, C.A. 133
Kozlov, Y.N. 355

Lamy, C. 315
Lee, P. 55
Leger, J.-M. 315
Le Mest, Y. 277
Lewis, S.K. 229
L'Her, M. 277
Liu, Y. 85
Lu, F. 229

Maksymiuk, K. 361
Matsue, T. 163
Melroy, O.R. 213
Mortimer, R. 185
Murthy, J.Y. 55

Nagai, H. 251
Nedyalkov, M. 341

Olson, J.B. 133
Osa, T. 163
Owlia, A. 297

Paliteiro, C. 193
Palm, U. 31
Pang, Z. 71
Pankratova, I. 31
Papoutsis, A. 315
Pavelich, B.J. 145
Pingarron Carrazon, J.M. 175
Polo Diez, L.M. 175
Pons, S. 145

Reviejo Garcia, A.J. 175
Rusling, J.F. 297

Salaita, G.N. 229
Salve, M. 31
Skalický, M. 355
Song, D. 229
Stoicoviciu, L. 93
Stroka, J. 263
Suda, M. 163

Tuzhi, P. 119

Uchida, I. 163

Väärtnõu, M. 31
Van Leeuwen, H.P. 1, 17
Villa, V. 119

Wang, E. 71, 85
Wang, J. 119
Weaver, M.J. 237

Zapien, D.C. 229

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY, VOLUME 234 (1987)

SUBJECT INDEX

Acetonitrile,
polarograpic studies on the interaction between macrocyclic compounds and cations or acids in ——— (Hojo et al.) 251

Acridine chloride,
proton transfer across the water/nitrobenzene interface facilitated by ——— (Liu, Wang) 85

Association/dissociation kinetics,
voltammetry of metal complex systems with different diffusion coefficients of the species involved. Part I. Analytical approaches to the limiting current for the general case including ——— (De Jong et al.) 1
Voltammetry of metal complex systems with different diffusion coefficients of the species involved. Part II. Behaviour of the limiting current and its dependence on ——— and lability (De Jong, Van Leeuwen) 17

Carbon fiber microelectrodes,
activation of ——— by alternating current electrochemical treatment (Wang et al.) 119

Clay modified electrodes,
———. Part VIII. Electrochemical behavior at montmorillonite and polypyrrole–montmorillonite films on platinum and glassy carbon electrodes (Castro-Acuña et al.) 347

Cobalt,
adsorption and reduction of iron and ——— phthalocyanines in DMSO at glassy carbon and pyrolytic graphite electrodes (Owlia, Rusling) 297
Electrochemical and spectroscopic properties of dicobalt cofacial porphyrins in non-aqueous media. Influence of the interporphyrin distance on the redox, spectrophotometric and EPR properties of the ——— centers (Le Mest et al.) 277

Cyclodextrin,
electrocatalytic oxidation of NADH by ferrocene derivatives and the influence of ——— complexation (Matsue et al.) 163

Dibenzyl viologen radicals,
"in situ" spectroelectrochemical studies of N,N'-——— and N,N'-diheptyl viologen radicals adsorbed on metallic (Pt, Au) electrodes (Crouigneau et al.) 329

Dicobalt cofacial prophyrins,
electrochemical and spectroscopic properties of ——— in non-aqueous media. Influence of the interporphyrin distance on the redox, spectrophotometric and EPR properties of the cobalt centers (Le Mest et al.) 277

Diheptyl viologen radicals,
"in-situ" spectroelectrochemical studies of N,N'-dibenzyl and N,N'-——— adsorbed on metallic (Pt, Au) electrodes (Crouigneau et al.) 329

Dihydronicotine adenine dinucleotide,
electrocatalytic oxidation of ——— by ferrocene derivatives and the influence of cyclodextrin complexation (Matsue et al.) 163

Dioxygen,
electroreduction of ——— on thin films of gold in alkaline solution (Paliteiro et al.) 193

Electrode kinetics,
on the role of ion solvation in ———: $M^{n+} + n\,e^- \rightleftharpoons M(Hg)$ (Maksymiuk, Galus) 361

Europium,
electrode processes on the Eu(III)/Eu(II) system in water + hexamethylphosphortriamide mixtures (Cetnarska, Stroka) 263

Ferricyanide,
adsorption of ——— at Pt (111) as a func-

tion of electrode potential studied by Auger spectroscopy (Baltruschat et al.) 229
Ferrocene,
electrocatalytic oxidation of NADH by ——— derivatives and the influence of cyclodextrin complexation (Matsue et al.) 163

Gold,
electroreduction of dioxygen on thin films of ——— in alkaline solution (Paliteiro et al.) 193
Redox mediation involving oxide films as examined by surface-enhanced Raman spectroscopy: peroxodisulfate reduction at oxide-modified ——— electrodes (Desilvestro, Weaver) 237
Study of ——— low index faces in KPF_6 solutions. Part I. Experimental behaviour and determination of the points of zero charge (Hamelin, Stoicoviciu) 93

Hexafluoroacetone,
determination of trace water in propylene carbonate using ——— (Hanson et al.) 107
Hexamethylphosphortriamide,
electrode processes on the Eu(III)/Eu(II) system in water + ——— mixtures (Cetnarska, Stroka) 263

Indole,
voltammetric determination of ——— in micellar and emulsified media (Pingarro Carrazon et al.) 175
Ion flux,
——— during electrochemical charging of Prussian Blue films (Feldman, Melroy) 213
Ionic adsorption theories,
comparison of the ——— for the electrode/solution interface by computer simulation (Damaskin et al.) 31
Ion solvation,
on the role of ——— in electrode kinetics: $M^{n+} + n\ e^- \rightleftharpoons M(Hg)$ (Maksymiuk, Galus) 361
Iron,
adsorption and reduction of ——— and cobalt phthalocyanines in DMSO at glassy carbon and pyrolytic graphite electrodes (Owlia, Rusling) 297
Isoporphyrins,
oxidative voltammetry of some tetraphenylporphyrins in the presence of nucleophiles leading to ——— (Hinman et al.) 145

Limiting current,
voltammetry of metal complex systems with different diffusion coefficients of the species involved. Part I. Analytical approaches to the ——— for the general case including association/dissociation kinetics (De Jong et al.) 1
Voltammetry of metal complex systems with different diffusion coefficients of the species involved. Part II. Behaviour of the ——— and its dependence on association/dissociation kinetics and lability (De Jong, Van Leeuwen) 17

Macrocylic compounds,
polarographic studies on the interaction between ——— and cations or acids in acetonitrile (Hojo et al.) 251
Metal complex systems,
voltammetry of ——— with different diffusion coefficients of the species involved. Part I. Analytical approaches to the limiting current for the general case including association/dissociation kinetics (De Jong et al.) 1
Voltammetry of ——— with different diffusion coefficients of the species involved. Part II. Behaviour of the limiting current and its dependence on association/dissociation kinetics and lability (De Jong, Van Leeuwen) 17
Methanol,
new results for the electrosorption of ——— on polycrystalline platinum in acid medium obtained by programmed potential voltammetry (Papoutsis et al.) 315
Montmorillonite,
clay modified electrodes. Part VIII. Electrochemical behavior at ——— and polypyrrole–montmorillonite films on platinum and glassy carbon electrodes (Castro-Acuña et al.) 347

Nitrobenzene,
potassium ion transfer across the ———/water interface facilitated by valinomycin (Koryta et al.) 355
Proton transfer across the water/——— interface facilitated by acridine chloride (Liu, Wang) 85
Study on the transfer of the base electrolyte ion TBA^+ across the water/——— interface by the linear current scanning method (Pang et al.) 71

Nucleophiles,
oxidative voltammetry of some tetraphenylporphyrins in the presence of ——— leading to isoporphyrins (Hinman et al.) 145

Oxide films,
redox mediation involving ——— as examined by surface-enhanced Raman spectroscopy: peroxodisulfate reduction at oxide-modified gold electrodes (Desilvestro, Weaver) 237

Perfluorosulphonic membrane,
percolation conductivity in a ——— with sorbed NaOH (Nedyalkov, Gavach) 341
Peroxodisulfate,
redox mediation involving oxide films as examined by surface-enhanced Raman spectroscopy: ——— reduction at oxide-modified gold electrodes (Desilvestro, Weaver) 237
Phthalocyanines,
adsorption and reduction of iron and cobalt ——— in DMSO at glassy carbon and pyrolytic graphite electrodes (Owlia, Rusling) 297
Platinum,
adsorption of ferricyanide at ——— (111) as a function of electrode potential studied by Auger spectroscopy (Baltruschat et al.) 229
New results for the electrosorption of methanol on polycrystalline ——— in acid medium obtained by programmed potential voltammetry (Papoutsis et al.) 315
Polypyrrole,
clay modified electrodes. Part VIII. Electrochemical behavior at montmorillonite and ———-montmorillonite films on platinum and glassy carbon electrodes (Castro-Acuña et al.) 347
Porphyrins,
electrochemical and spectroscopic properties of dicobalt cofacial ——— in non-aqueous media. Influence of the interporphyrin distance on the redox, spectrophotometric and EPR properties of the cobalt centers (Le Mest et al.) 277
Potassium,
——— ion transfer across the nitrobenzene/water interface facilitated by valinomycin (Koryta et al.) 355
Potassium hexafluorophosphide,
study of gold low index faces in ——— solutions. Part I. Experimental behaviour and determination of the points of zero charge (Hamelin, Stoicoviciu) 93
Propylene carbonate,
determination of trace water in ——— using hexafluoroacetone (Hanson et al.) 107
Proton transfer,
——— across the water/nitrobenzene interface facilitated by acridine chloride (Liu, Wang) 85
Prussian Blue,
ion flux during electrochemical charging of ——— films (Feldman, Melroy) 213

Reynolds number,
influence of Schmidt number and ——— on the behavior of rotating ring–disk electrodes (Lee, Murthy) 55

Schmidt number,
influence of ——— and Reynolds number on the behavior of rotating ring–disk electrodes (Lee, Murthy) 55
Sodium hydroxide,
percolation conductivity in a perfluorosulphonic membrane with sorbed ——— (Nedyalkov, Gavach) 341

Tetrabutylammonium cation,
study on the transfer of the base electrolyte ion ——— across the water/nitrobenzene interface by the linear current scanning method (Pang et al.) 71
Tetraphenylporphyrins,
oxidative voltammetry of some ——— in the presence of nucleophiles leading to isoporphyrins (Hinman et al.) 145
Trace water,
determination of ——— in propylene carbonate using hexafluoroacetone (Hanson et al.) 107
Tungsten diselenide,
preparation and electrochemical characterization of ——— electrodes having a wide range of doping densities (Koval, Olson) 133

Valinomycin,
potassium ion transfer across the nitrobenzene/water interface facilitated by ——— (Koryta et al.) 355

Zinc,
electrochemical oxidation of ——— studied by ellipsometry (Hamnett, Mortimer) 185

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY

Vol. 234 Nos. 1 and 2 September 25, 1987

CONTENTS

Voltammetry of metal complex systems with different diffusion coefficients of the species involved. Part I. Analytical approaches to the limiting current for the general case including association/dissociation kinetics
H.G. de Jong, H.P. van Leeuwen (Wageningen, The Netherlands) and K. Holub (Prague, Czechoslovakia) 1

Voltammetry of metal complex systems with different diffusion coefficients of the species involved. Part II. Behaviour of the limiting current and its dependence on association/dissociation kinetics and lability
H.G. de Jong and H.P. van Leeuwen (Wageningen, The Netherlands) 17

Comparison of the ionic adsorption theories for the electrode/solution interface by computer simulation
B. Damaskin, I. Pankratova (Moscow, U.S.S.R.), U. Palm, K. Anni, M. Väärtnõu and M. Salve (Tartu, U.S.S.R.) 31

The influence of Schmidt number and Reynolds number on the behavior of rotating ring–disk electrodes
P. Lee and J.Y. Murthy (Tempe, AZ, U.S.A.) 55

Study on the transfer of the base electrolyte ion TBA^+ across the water/nitrobenzene interface by the linear current scanning method
Z. Pang, C.A. Chang (El Paso, TX, U.S.A.) and E. Wang (Changchun, P.R. China) 71

Proton transfer across the water/nitrobenzene interface facilitated by acridine chloride
Y. Liu and E. Wang (Changchun, P.R. China) 85

Study of gold low index faces in KPF_6 solutions. Part I. Experimental behaviour and determination of the points of zero charge
A. Hamelin and L. Stoicoviciu (Meudon, France) 93

Determination of trace water in propylene carbonate using hexafluoroacetone
K.J. Hanson, L.J. Anthony and R.A. Holland (Murray Hill, NJ, U.S.A.) 107

Activation of carbon fiber microelectrodes by alternating current electrochemical treatment
J. Wang, P. Tuzhi and V. Villa (Las Cruces, NM, U.S.A.) 119

Preparation and electrochemical characterization of WSe_2 electrodes having a wide range of doping densities
C.A. Koval and J.B. Olson (Boulder, CO, U.S.A.) 133

Oxidative voltammetry of some tetraphenylporphyrins in the presence of nucleophiles leading to isoporphyrins
A.S. Hinman, B.J. Pavelich, A.E. Kondo (Calgary, Canada) and S. Pons (Salt Lake City, UT, U.S.A.) 145

Electrocatalytic oxidation of NADH by ferrocene derivatives and the influence of cyclodextrin complexation
T. Matsue, M. Suda, I. Uchida, T. Kato, U. Akiba and T. Osa (Sendai, Japan) 163

Voltammetric determination of indole in micellar and emulsified media
J.M. Pingarron Carrazon, A.J. Reviejo Garcia and L.M. Polo Diez (Madrid, Spain) 175

The electrochemical oxidation of zinc studied by ellipsometry
A. Hamnett (Oxford, Great Britain) and R. Mortimer (Cambridge, Great Britain) 185

The electroreduction of dioxygen on thin films of gold in alkaline solution
C. Paliteiro (Coimbra, Portugal), A. Hamnett and J.B. Goodenough (Oxford, Great Britain) ... 193

Ion flux during electrochemical charging of Prussian Blue films
B.J. Feldman and O.R. Melroy (San Jose, CA, U.S.A.) 213

Adsorption of ferricyanide at Pt (111) as a function of electrode potential studied by Auger spectroscopy
H. Baltruschat, F. Lu, D. Song, S.K. Lewis, D.C. Zapien, D.G. Frank, G.N. Salaita and A.T. Hubbard (Cincinnati, OH, U.S.A.) 229

(*continued on p. 3 of cover*)

Contents (*continued*)

Redox mediation involving oxide films as examined by surface-enhanced Raman spectroscopy: peroxodisulfate reduction at oxide-modified gold electrodes
J. Desilvestro and M.J. Weaver (West Lafayette, IN, U.S.A.) 237

Polarographic studies on the interaction between macrocyclic compounds and cations or acids in acetonitrile
M. Hojo, M. Hagiwara, H. Nagai and Y. Imai (Kochi, Japan) 251

Electrode processes on the Eu(III)/Eu(II) system in water + hexamethylphosphortriamide mixtures
M. Cetnarska and J. Stroka (Warsaw, Poland) 263

Electrochemical and spectroscopic properties of dicobalt cofacial porphyrins in non-aqueous media. Influence of the interporphyrin distance on the redox, spectrophotometric and EPR properties of the cobalt centers
Y. Le Mest, M. L'Her (Brest, France), J.P. Collman, K. Kim, N.H. Hendricks and S. Helm (Stanford, CA, U.S.A.) 277

Adsorption and reduction of iron and cobalt phthalocyanines in DMSO at glassy carbon and pyrolytic graphite electrodes
A. Owlia and J.F. Rusling (Storrs, CT, U.S.A.) 297

New results for the electrosorption of methanol on polycrystalline platinum in acid medium obtained by programmed potential voltammetry
A. Papoutsis, J.-M. Leger and C. Lamy (Poitiers, France) 315

"In situ" spectroelectrochemical studies of *N,N'*-dibenzyl and *N,N'*-diheptyl viologen radicals adsorbed on metallic (Pt, Au) electrodes
P. Crouigneau, B. Beden, A.M. Braun and O. Enea (Poitiers, France) 329

Short communications

Percolation conductivity in a perfluorosulphonic membrane with sorbed NaOH
M. Nedyalkov (Sofia, Bulgaria) and C. Gavach (Montpellier, France) 341

Clay modified electrodes. Part VIII. Electrochemical behavior at montmorillonite and polypyrrole–montmorillonite films on platinum and glassy carbon electrodes
C.M. Castro-Acuña, F.-R.F. Fan and A.J. Bard (Austin, TX, U.S.A.) 347

Potassium ion transfer across the nitrobenzene/water interface facilitated by valinomycin
J. Koryta, Y.N. Kozlov and M. Skalický (Prague, Czechoslovakia) 355

Preliminary note

On the role of ion solvation in electrode kinetics: $M^{n+} + n\,e^- \rightleftharpoons M(Hg)$
K. Maksymiuk and Z. Galus (Warsaw, Poland) 361

Book review 369

Author index 370

Subject index 371

Errata 374

JOURNAL OF ELECTROANALYTICAL CHEMISTRY AND INTERFACIAL ELECTROCHEMISTRY and BIOELECTROCHEMISTRY AND BIOENERGETICS

Publication schedule for the 1988 subscription (Please note that Vols. 233–238 appear in 1987). Publication of Bioelectrochem. Bioenerg. is behind schedule

Month	S (1987)	O (1987)	N (1987)	D (1987)	
J. Electroanal. Chem.	233/1+2 234/1+2	235/1+2 236/1+2	237/1 237/2	238/1+2	The publication schedule for further issues will be published later.
Bioelectrochem. Bioenerg.					